

## Math 10 GMF – Measurement Exam Review - answers

Show work on looseleaf. Transfer answers to the provided space

Name: Answers

1. Provide the area, in square feet, of a rectangular room that has a length of 6.2 m and a width that is 2 m less than the length? 280.3 ft<sup>2</sup>

2. Joan hiked a total of 4.6 kilometres on a walking trail. How many feet is that? 15091.86 ft

3. The typical way to represent a length of 136 inches in is to state it as 11 feet 4 inches.

4. A carpenter determines that he needs a total of 52 ' 9 13/16 " of baseboard trim to finish a room. The hardware store where he buys all of his material only sells it by the full metre. How many metres of baseboard will he need to buy to finish the room? 16.1 m needed – therefore, he must buy 17 m

5. The bark on a 16-foot log with a diameter of 20 inches needs to be removed before the log is used in the construction of a log home. What is the area of bark that will be removed? (to the nearest in<sup>2</sup>) 12064 in<sup>2</sup>

6. A square-based pyramid has a base length of 10 feet, a height of 49 inches and a slant length of 5 yards. What is the surface area(in m<sup>2</sup>), including the base? 35.57 m<sup>2</sup>

7. Joan fills a 24 L bucket with a container that holds 6 pints (US). How many times will she have to fill up the container in order to fill up the bucket? 8.45 containers equals 1 bucket therefore 9 trips needed

8. A circular backyard sandbox has a circumference of 12 yards. It is uniformly filled with sand that is 5 inches deep. What is the volume of sand used, in yd<sup>3</sup>? 1.59 yd<sup>3</sup>

9. The temperature outdoors on a hot summer day is 95°F and the humidity makes it feel 14°F warmer. What temperature does it feel like in degrees Celsius? 42.8°C

10. A pot of water is being boiled at a high altitude and has reached a temperature of 194°F. If the boiling point of water at this altitude is 105°C, then how many more degrees Fahrenheit must the water heat up? 27°F

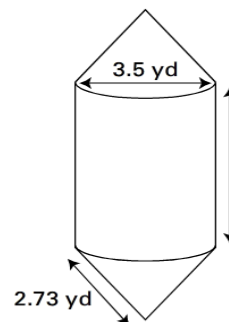
11. Steven bought 1 pound 4 ounces of washers and 2 pounds 14 ounces of bolts. What is the preferred way to represent the combined weight of his purchases? 4 lbs 2 ounces

12. The object shown below is a cylinder with conical ends.

If the height of the cylindrical portion is 5.5 m, then determine the surface area (in yd<sup>2</sup>) and volume (in yd<sup>3</sup>) of the object, rounded to the nearest tenth.

$$SA = 96.2 \text{ yd}^2$$

$$V = 71.3 \text{ yd}^3$$



BONUS What is the side length (to the nearest tenth of a cm) of a cube that has the same volume as the cylinder shown below?

$$8.449 \text{ cm} = \underline{8.4 \text{ cm}}$$

